



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/919,925	08/02/2001	Takahiro Fukuhara	SON-2194	3992
23353	7590	02/23/2005	EXAMINER	
RADER FISHMAN & GRAUER PLLC			DANG, DUY M	
LION BUILDING			ART UNIT	
1233 20TH STREET N.W., SUITE 501			PAPER NUMBER	
WASHINGTON, DC 20036			2621	

DATE MAILED: 02/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/919,925

Applicant(s)

FUKUHARA ET AL.

Examiner

Duy M Dang

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 13 and 16 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14 is/are allowed.
- 6) ☒ Claim(s) 1, 8, 9 and 15 is/are rejected.
- 7) ☒ Claim(s) 2-7 and 10-12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Applicant's amendment filed 10/6/04 has been entered and made of record.
2. Applicant's election with traverse of Group I invention (Claims 1-12, and 14-15) filed 10/6/04 is acknowledged. Because Applicant (1) did not provide what ground the traversal is on and (2) failed to distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). Therefore, the requirement is still deemed proper and is therefore made FINAL.
3. Claims 13 and 16 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Group II invention, there being no allowable generic or linking claim. Applicant's amendment to officially cancel claims 13 and 16 in response to this communication is advised.
4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 8-9, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Taniguchi et al. [US Patent No. 6,067,383].

Regarding claim 1, Taniguchi teaches an image coding device [see figures 1 and 20] comprising:

memory means for reading and storing predetermined image areas of input image data [see data storage element 602 of figure 20 and col. 25 lines 21-25];

a wavelet conversion section for performing wavelet conversion filtering on the image areas, in a horizontal or vertical direction as soon as the image data is stored in the memory means [see figure 1 which is a representative of a wavelet transform employing filtering image on horizontal or vertical direction]; and

the wavelet conversion section including fixed-type wavelet conversion means and integer type wavelet conversion means [see 5-3 tap filter employed in filters used in wavelet transform according to col. 25 lines 34-58. This interpretation is consistent with applicant's disclosed on page 15 lines 13-16 and page 18 lines 8-9].

Regarding claim 8, it is noted this claim is a method claim reciting the features called in claim 1 above. Thus, claim 8 is also rejected for the same reasons as set forth in claim 1 above.

Regarding claim 9, Taniguchi teaches an image decoding device [see decoding means shown in figure 39] comprising: fixed point type and integer type wavelet reverse conversion means [see filters 801 and 802 in figure 39 and detailed in figure 31]; and memory means for writing and keeping only a predetermined image area of a decoded image generated by reverse conversion [see memory 905 and 906 in figure 39].

Regarding claim 15, it is noted that this claim is a method claim reciting the features called for in claim 9. Thus, claim 15 is also rejected for the same reasons as set forth in claim 9 above.

6. Claims 2-7 and 10-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Claim 14 is allowed

Art Unit: 2621

8. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 2 and 10, the closest prior art [Taniguchi et al.] fails to teaches wherein the fixed point type wavelet conversion means comprises a bit shifter and a wavelet conversion and the integer type wavelet conversion means comprises only the wavelet converter. Dependent claims 3-5 and 11-12 are also allowable for the same reasons as above.

Regarding claim 6, the closest prior art [Taniguchi et al.] fails to teaches wherein the fixed point type wavelet is selected to perform reversible coding and the fixed point type wavelet conversion means is selected to perform irreversible coding.

Regarding claim 7, the closest prior art [Taniguchi et al.] fails to teaches wherein the fixed point type wavelet conversion means is selected to perform coding with image quality taken to be important, and the integer type wavelet conversion is selected to perform reduction of hardware, saving of power consumption or coding at a low bit-rate.

Regarding claim 14, the closest prior art [Taniguchi et al.] fails to teaches an image decoding device into which a coded bit stream generated by a coding device comprising integer type wavelet conversion means and/or fixed-point type wavelet conversion means is inputted, the image decoding device comprising: means for detecting whether wavelet conversion performed by the coding device is of an integer type or a mixed-point type, from the inputted coded bit stream, integer type wavelet reverse conversion means for decoding the coded bit stream converted by the integer type wavelet conversion means; and means for controlling decoding operation to be paused if the inputted coded bit stream is of the fixed-point type.

Art Unit: 2621

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duy M Dang whose telephone number is 703-305-1464. The examiner can normally be reached on Monday to Friday from 5:30AM to 2:00PM..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on 703-308-5246. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

dmd
2/05



Duy M. Dang
Patent Examiner